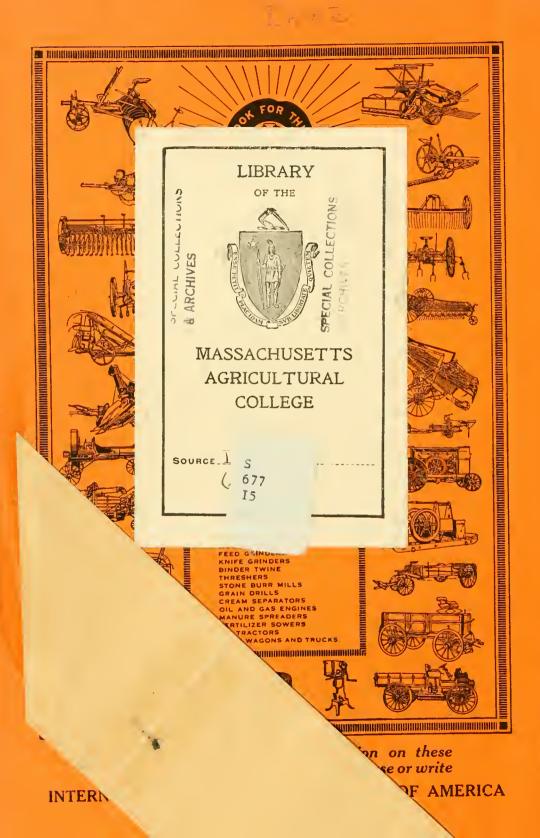
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### INTERNATIONAL HARVESTER



CATALOGUES

S 677 **I5** 



SIGHTING.

THRESHERS



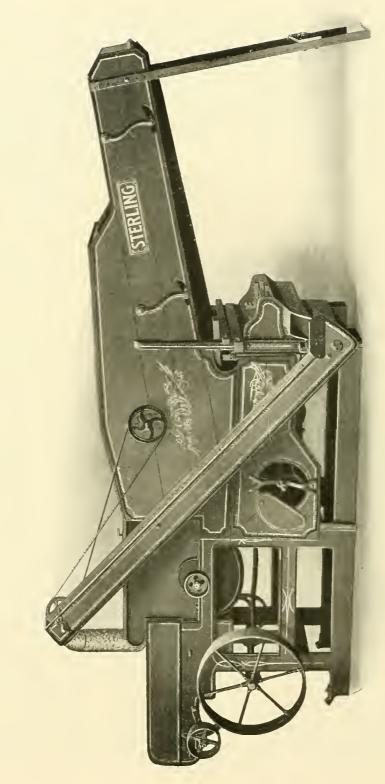
## Sterling

### THRESHERS

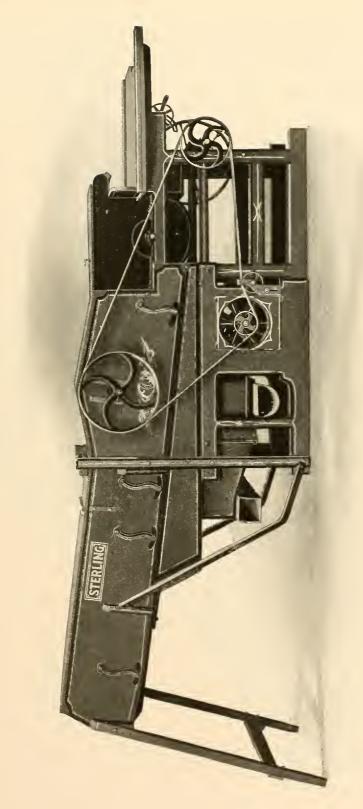
INTERNATIONAL HARVESTER COMPANY OF AMERICA



# Sterling Thresher Nos. 21 and 21%

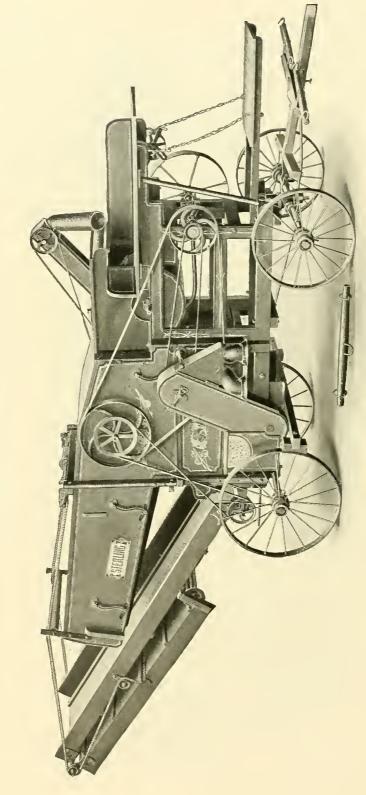


Sterling Thresher Nos, 21 and 2115, barn floor type, showing tailings elevator. Ready for operation

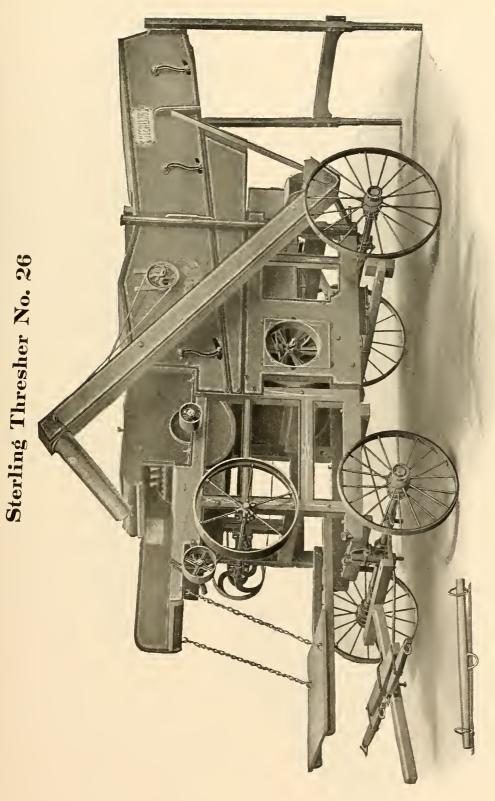


Sterling Thresher No. 30, barn floor type, showing grain spont. Ready for operation

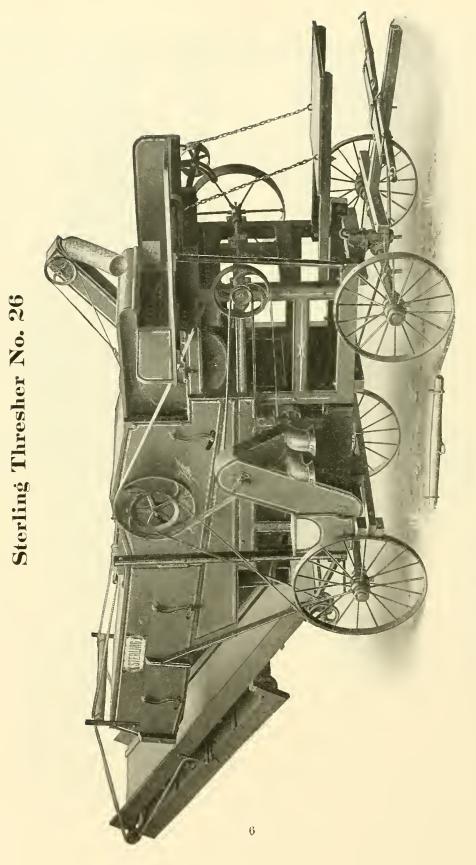
## Sterling Thresher No. 21%



Sterling Thresher No. 21% on mounting truck, sbowing folding straw stacker, bagger and tailings elevator



Sterling Thresher No. 26 on mounting truck, showing tailings elevator, and automatic wind-regulating device. Ready for Operation



Sterling Thresher No. 26 on mounting truck, showing folding straw stacker and bagger



### Why You Should Be a Sterling Owner

The adaptability of the Sterling Thresher to the farm with a limited acreage has for many years been one of the principal assets in its favor.

Its convenience for use in a hilly country where roads are not always of the best and sometimes quite steep, is another factor which appeals to farmers living in such regions.

This practical little machine has been designed chiefly with a view toward meeting the demand for a light thresher, easily transported, and having a capacity adapted to such farms as cannot be reached by the heavier machines.

Another thing—while the cost of a large thresher is almost prohibitive for a mountainous region, or where small farms are the rule, the Sterling is exceptionally well suited for individual use without costing more than the small farmer can afford to pay. Where two farmers club together for the purchase of a Sterling Thresher outfit, the cost to each is still further reduced.

Furthermore—it requires very little power to operate. A 4 or 6-H. P. I H C oil engine will furnish ample power for threshing all kinds of grain and seeds, such as wheat, rye, oats, barley, buckwheat, Kaffir corn, sorghum, flax, grass seed, beans, cow peas, soy beans, and peanuts. Its capacity is limited only by the condition of the grain or seed to be threshed.

Another point in favor of the Sterling is that a man and a boy can easily attend to all duties connected with the threshing operation.

The four sizes of Sterling Threshers are built with the following sizes of cylinders and separation respectively— $21 \times 28$ ,  $21 \times 33$  (or No.  $21 \frac{1}{2}$ ),  $26 \times 33$ , and  $30 \times 37$ . The first two sizes differ only in the size of the separation area, as the equipment and general features are the same.

Sterling threshers are furnished unmounted, mounted on an individual truck, or mounted on a combination truck with an I H C Titan 4, 6 or 8-H. P. oil engine, depending on the size of the thresher. Combination trucks are made in two sizes.

The unmounted machine is an ideal barn floor thresher, requiring very little space; it can be made a regular fixture and threshing can be done in the barn on rainy days or whenever convenient.

Straw stackers especially adapted to barn floor threshing, with a length of 60 feet if necessary, can be furnished when ordered. These stackers are built so that they can be used straight away, or at right angles, either right or left hand. They are sent adjusted for straight away use only, unless the angle attachment is ordered. When placed on a mounting truck the thresher is more conveniently used in the field, as this rig is very light and easily transported.

When a Sterling Thresher and an IHC oil engine are mounted together on a combination truck, an ideal threshing outfit is formed. Being always lined up and set ready for operation, the outfit can be started in a moment.

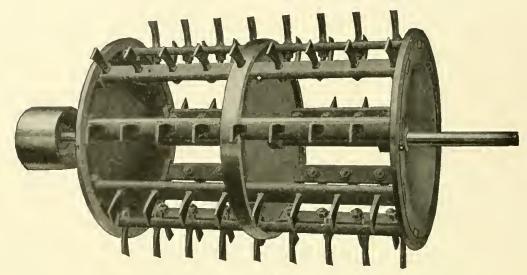
While having a very low fuel consumption, ample power and economy of operation are insured. A combination truck can easily be turned into a sawing rig by dismounting the thresher and attaching the saw.

### Combination Outfit of Great Practical Value

When the cost of a Sterling thresher is compared with the amount of work it will do in one season it can readily be reasoned out that an investment in a Sterling is really a paying one. Especially is this true of the combination outfit. With the thresher dismounted, the engine can be hauled around on the truck to various jobs whenever the occasion requires. It is an easy matter to adjust the truck so that a feed grinder, corn sheller or sawing outfit can be mounted or belted to the engine in place of the thresher. The truck and engine can thus be adapted for various economical combinations with practically no expense.



### A Strong Steel Bar Cylinder



9-bar steel cylinder. Note powerful construction

The Sterling Thresher is equipped with a 9-bar steel cylinder, which is one of the strongest and most durable cylinders made. The shaft is made of the best quality of steel. The steel bars to which the teeth are fastened are solid, of good weight, and have a smooth rounded surface. The cylinder heads are of gray iron. They are forced on the shaft under heavy pressure and fit so tightly that they cannot work loose. The tooth bars are then pinned to the solid heads, and heavy bands of the best quality of wrought iron are shrunk on to the ends of the cylinder. This method of fastening the tooth bars insures practically a one-piece cylinder.

The cylinder boxes are readily adjusted, and are babbitted with a good quality of anti-friction metal. Between the two halves of the bearing are a number of thin wooden wedges, or shims, which can be removed, one or two at a time, as fast as the babbitted bearing wears down. By removing these, the bearings can be tightened and fitted more closely.

The cylinder heads are concave and the bearing boxes are therefore closer together. This allows a smaller shaft to be used, requiring less power than a heavier shaft. The wear on the bearings is also greatly reduced. Roller bearing boxes are furnished on special order only at an additional cost.

The cylinder on the Sterling has a very steady motion when running at full threshing speed. It is an evident fact that steadiness in a cylinder is all-important during operation, as the cylinder is practically the balance wheel of the thresher.

A cylinder which has not been properly adjusted is sure to bring trouble. Sagging must be guarded against. Means have been provided so that the cylinder in the Sterling Thresher can be kept absolutely true at all times.

The construction of the top and end of the machine, just above and a little back of the cylinder, is such as to cause a heavy suction of air which carries dust through with the straw and away from the man who feeds the machine.



### Adjustable Concaves



Regular grain concave

Sterling Threshers are of the over-shot type. The concaves quickly adjust themselves to any hard foreign substance which may, by accident, sometimes get into a machine. Should a wrench, for example, come between the cylinder and concave, the latter will lift itself automatically to prevent any breakage. The value of this point can be seen at a glance. Breakages of concaves and bending of

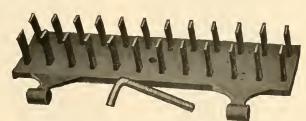
This adjustable concave has been

teeth are reduced to a remarkably small number every year. in use since 1899 and has been entirely satisfactory.

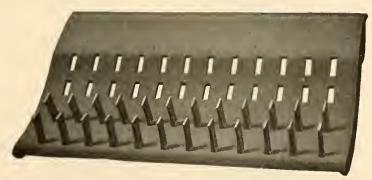
The floating concave, which is an important feature of the Sterling Thresher, is made of

one solid piece of gray iron and is therefore, for all threshing purposes, practically everlasting. The front of the concave is hung on a heavy rod which passes through the machine from one side to the other, forming a hinge for the concave. The rear is held in position by a hand-adjusting screw, which passes through the top of the thresher, and with which the thresher operator can raise or lower the concave over the cylinder to suit the condition of the grain and straw passing into the machine.

When threshing peanuts, a different concave from that regularly furnished with the machine is required. A special adjustable concave for this purpose is furnished on order at an additional cost. The two



Section pea and peannt concave. Note hand adjusting screw. This section is joined to the one below to complete pea and peannt concave



Section pea and peanut concave. A complete concave is shown in the upper right hand corner of next page

front rows of teeth on this coneave can be raised slightly to suit conditions of vines and peanuts or, if desired, can be withdrawn entirely.



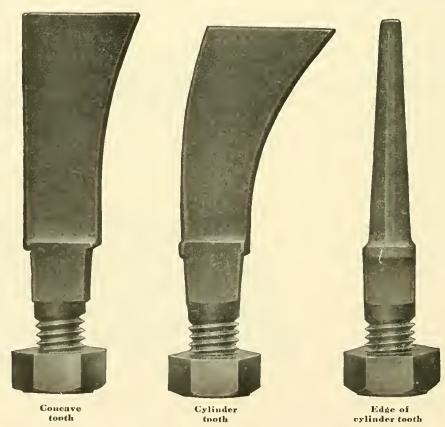
### Adjustable Concaves

(Continued)

The importance of properly designed concaves is often overlooked. The Sterling is well equipped in this respect. The teeth are joined so firmly to the bed of the concave that practically a one-piece mechanism is the result. Full instructions for properly changing these concaves are given with each machine. The accompanying illustrations will give a clear understanding, not only of the regular grain concave, but also the special cow pea and peanut concave which is shown both in sections and complete.



Complete pea and peanut enneave



Note the heavy, square shoulder and the coorse thread. The teeth are shown full size



### The Sterling Thresher is Well Equipped with Tough Cylinder and Concave Teeth

The cylinder and concave teeth in the Sterling Thresher are of drop hammer forged steel. They are tough and pliable. When bent they do not show cracks. Bent cylinder or concave teeth can easily be straightened with the tooth set furnished with each machine, or with a heavy hammer. This pliability of the teeth saves hundreds of dollars annually to owners, as breakages of these important fixtures are very infrequent.

The cylinder teeth are firmly set into square holes in the cylinder tooth bars. This method of setting permits the use of good strong teeth, with heavy square shoulders, and prevents them from twisting in their sockets. Cylinder teeth are wider at the working end than concave teeth and are slightly narrower near the shoulder, as will be seen in the accompanying illustration.

The teeth of the cylinder and concave can be accurately spaced by means of a very simple adjusting device under the ends of the cylinder shaft. A 4-inch lag bolt, or adjusting screw, passes through the sill of the main frame directly under the lower half of the journal box. The end of this bolt is held tightly against a projecting ear, or part of the journal box, on the inside of the sill.

Should there be any end play of the cylinder which would cause the cylinder teeth to interfere with or strike the concave teeth, the cylinder can be quickly centered by simply loosening the lag bolt on the right or left side of the machine, as the case might be, and tightening the corresponding bolt on the other side. When the cylinder teeth are not centered in the space between the concave teeth, broken grain is the inevitable result. By means of the lag bolts, the cylinder is held in absolute alignment and the relation between the cylinder and concave teeth can be adjusted to a hair's breadth with a minimum of trouble and loss of time on the part of the operator. Trouble is often caused by bent teeth. Every thresherman or operator should make frequent examinations of the condition of the cylinder and concave teeth.

### Number of Cylinder and Concave Teeth

The different sizes of Sterling Threshers are equipped with cylinder and concave teeth as follows:

Sterling Thresher Nos. 21 and  $21\frac{1}{2}$  ---- 57 cylinder teeth and 36 concave teeth Sterling Thresher No. 26 ----- 75 cylinder teeth and 60 concave teeth Sterling Thresher No. 30 ------- 84 cylinder teeth and 71 concave teeth

### Revolving Apron a Feature

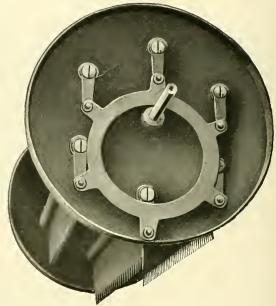
A valuable improvement in thresher construction is the patent revolving apron used on Sterling Threshers. A device of this kind has been needed for a long time, but in spite of its apparent simplicity of design, the idea has been developed only within a comparatively recent period.



### Revolving Apron a Feature

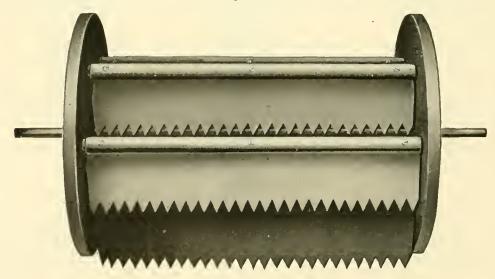
The object of the revolving apron is to stop the grain and straw as it comes through the cylinder, then carry it through to the shakers so that the entire shaker area is used to separate the grain from the straw. This improvement not only keeps the grain from flying over the shaker but increases the capacity of the machine, as the aprons keep the straw moving and prevent wrapping and clogging at the cylinder. There is always more or less waste of valuable time when the cylinder becomes clogged or wrapped, as operation must be discontinued while the straw is being cleaned out. This trouble is entirely done away with in Sterling Threshers.

The patent revolving apron is of steel and the different sections are connected to circular ends or heads. It is revolved by means of a belt wheel. By a very simple mechanical contrivance, as can be seen in the accompanying illustration, each steel section of the revolving apron is always in a vertical position as the drum revolves. The grain



Device on end of revolving apron for keeping steel flaps in a vertical position

and straw are absolutely prevented from passing through, in spite of the force exerted by the cylinder. An inclined fender board, placed between the cylinder and revolving apron, directs the straw downward at an angle so that it strikes just below the center of the mechanism.



A strong feature of the Sterling Thresher-the patent revolving apron



### Shakers Have High Efficiency

Good shakers are necessary if the thresher is to give satisfaction in all kinds and conditions of grain. In this, as in other respects, the Sterling Thresher is beyond criticism. An idea of its general efficiency may be gained from the fact that the Sterling, with its equipment of sieves and

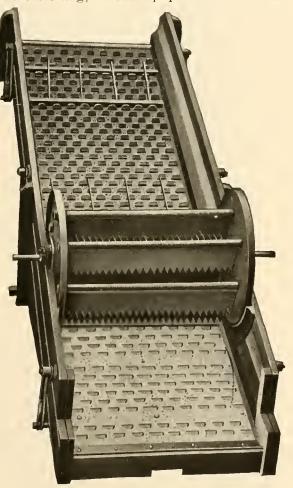
special attachments, threshes and cleans such different grains and seeds as wheat, rye, oats, bariey, flax, sorghum, peas, Kaffir corn, buckwheat, rice, grass seed, cow peas, peanuts, etc.

The shakers are constructed with a double bottom, having a rapid vibrating movement and a number of beater forks which, when in motion, have a steady up and down movement to assist in separating the grain from the chaff and the straw. The upper bottom, over which the straw passes after leaving the cylinders, is made of galvanized sheet metal, which will not rust and is practically unwearable. It is perforated with small half round lipped holes through which the grain and chaff are dropped to the under bottom, and carried back to the fan and sieves to be cleaned.

By means of the turned up lip construction and the reciprocating motion of the shakers a positive forward movement is given to the straw which is forced to the rear of the shakers and dropped to the ground or to the straw carrier.

### Crank and Pitman

The crank shaft and pitman are important features in Sterling Threshers, and the construction of these leaves nothing to be desired. The crank shaft is forged out of one piece of solid high grade steel. The bearings are accurately turned, and run with very little friction.



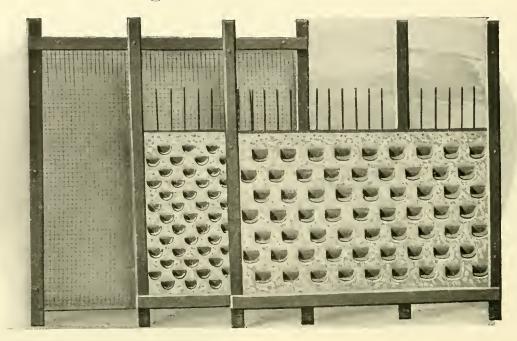
Interior view of Sterling Thresher, showing shakers and revolving apron

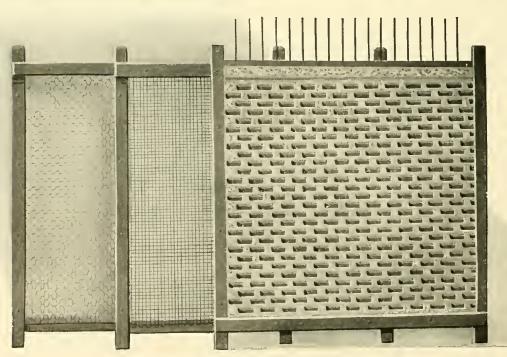
The pitman is strong and durable. It is made of tubular steel, and has a pitman box so designed that the wear can be taken up in a few moments.





### A Large Assortment of Sieves





Types of sieves used in Sterling Threshers



### A Large Assortment of Sieves

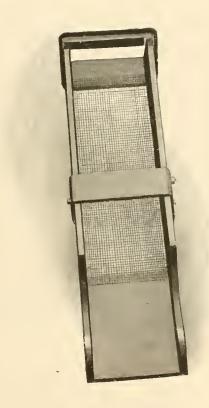
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The different sizes of Sterling Threshers are designed to successfully handle all kinds of grain and seed, but they are not regularly furnished with the full complement of sieves required to do all this work. As the various seeds and grains differ in size, shape, etc., in order to secure the best results, differently constructed sieves should be used for different grains. In ordering a Sterling Thresher, the purchaser should state what kind of work he will want to use it for so as to be certain to get the correct sieve equipment.

All Sterling Threshers are regularly equipped with one wheat sieve, one out sieve, and a rye sieve. While this regular equipment will answer for a number of purposes besides those mentioned, special sieves must be used when threshing and cleaning buckwheat, cow peas, grass seed, peanuts, rice, flax, sorghum, etc.

When a machine is ordered for threshing rice, it should be so stated for the reason that the thresher must be speeded more slowly than for threshing grain, and must be equipped with the correct size of pulley.

A special sieve, or extension of the grain spout, is regularly furnished with the two largest sizes of threshers when ordered with mounting trucks. This sieve is hung at the end of the grain spout and effectually screens or sifts the dust, dirt, or broken peanuts and cow peas, allowing only clean and whole peas or peanuts to fall into the measures. When this sieve is used for grain, it is equipped with a smooth bottom and it then becomes a chute, and serves only to give



Special sieve, or extension of the grain spout for screening or sifting the peas or peanuts before they fall into the sucks or measures

and it then becomes a chute, and serves only to give direction to the grain. The sieves that do not belong to the regular equipment can be had at a nominal price.

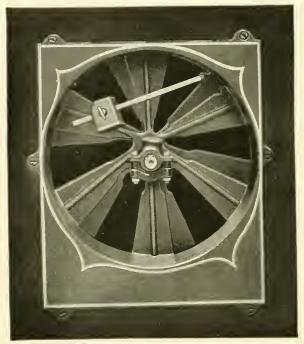
### Self-adjusting Wind Regulator

The two largest threshers—the 26-in. and the 30-in.—are equipped with an automatic self-adjusting wind regulator, located on the power side of the machine immediately to the left of the grain spout. It consists of two sets of six steel blades placed on a shaft in a circular opening on the side of the thresher just below the fan. One set is fastened to the side of the opening, while the other is free on the shaft. The openings between the blades are the same size as the blades themselves, and when less wind is required can be partially overlapped by the free blades.



### Self-Adjusting Wind Regulator

(Continued)

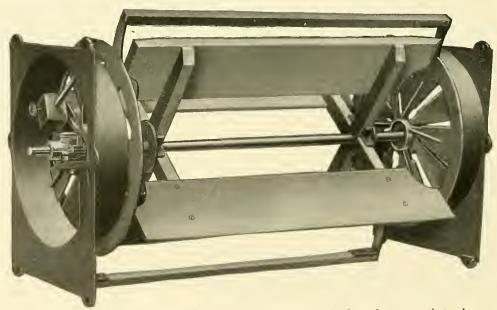


End view patent self-adjusting wind regulating device

Two light wooden rods, the width of the machine, and connecting the inner set of blades at the top and bottom, automatically reduce or increase the wind supply, being pulled in the direction of the air blast from the fan, increasing or decreasing the opening according to the variation in speed. When the machine is running fast the air supply is reduced and when running slow it is increased and is in this way automatically regulated.

The proper volume is fixed by moving the weight to different points on the balance lever. See illustration at the left.

It is a well-known fact that the speed of the cylinder varies even with the most careful attention of a skilled operator. The speed is increased when the cylinder is empty, and at such times there should be less wind on the sieves so as to prevent grain from being blown over and wasted. When so much grain is fed into the cylinder as to retard its motion, it is important that there should be more wind directed toward the sieves to prevent chaff from coming down with the grain.



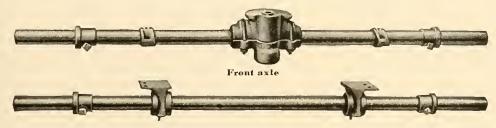
Side view self-adjusting wind regulating device showing fan and wooden connecting rods



### **Durable Belts**

The belts used on Sterling Threshers are either flat or round. All flat belts are of rubber, while the round belts are of the made-up leather variety. These belts are very strong and durable, the width and thickness being regulated entirely by the amount of strain to which they are subjected in doing the work. The thresher is regularly furnished with all necessary belts except the main drive belt from cylinder to engine, and on the combination outfit about 26 feet of rubber belt, 4 inches wide, and either 4 or 5-ply, is required. This belt is furnished extra.

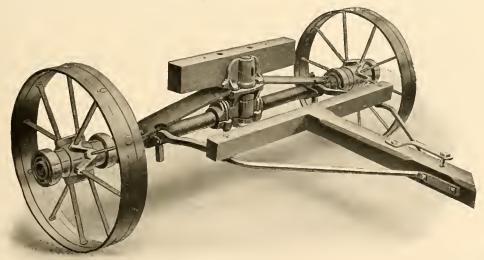
### Trucks, Wheels and Axles



Rear axle

The trucks consist of metal wheels, axles, bolster, bolster brace, pole, neckyoke, and double-trees.

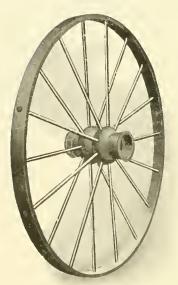
On the single trucks each axle is fastened directly to the thresher. The mounting trucks for threshers only are considerably lighter than the combination truck for the thresher and oil engine. This combination truck has two heavy wooden sills running the length of the truck upon which the thresher is mounted on one end and an I H C oil engine at the other. The length of the combination truck over all is 13 feet, 6 inches.







Front wheel on mounting truck



Rear wheel on mounting truck

### Diameter of Wheels

Sterling No. 30—Diameter of Front Wheels, Mounting Truck—31 inches. Rear Wheels—39 inches. Width of Tires—2¼ inches.

Sterling No. 26—Diameter of Front Wheels, Mounting Truck — 28 inches. Rear Wheels—36 inches. Width of Tires—2 inches.

Combination Truck—Diameter of Front Wheels—24 inches. Rear Wheels—28 inches. Width of Tires—4 inches; ½ inch thick.

### Axles and Width of Tread

Thresher sizes	No. 30	No 26	Combination Truck
Length of axles . Width of tread . (Center to center)	6 ft. 10 in.	6 ft.	5 ft. 11½ in.
	5 ft. 8½ in.	5 ft. 2 in.	5 ft. 0 in.

### Shafting and Bearings

All shafts in Sterling Threshers are of high grade steel. They are not too heavy and not too light, and will withstand, without twisting or bending, all strains to which they may be put. They are all accurately turned and thoroughly tested.

The bearings are all lathe turned and polished and so constructed that the wear is taken up in the most approved manner. The boxes are heavily lined or babbited with a good quality of non-friction metal. This lining can be easily removed when too thin and a new lining put in. Sterling Threshers have always been known for their light-running features.

### Dimensions of Sterling Threshers

Thresher sizes	lleight	Length	Width
Sterling No. 21            Sterling No. 21½            Sterling No. 26            Sterling No. 30	5 ft.	13 ft. 8 in.	4 ft. 4 in.
	5 ft. 3½ in.	13 ft. 8 in.	4 ft. 10 in.
	5 ft. 5 in.	16 ft.	4 ft. 10 in.
	5 ft. 10½ in.	16 ft. 8 in.	6 ft. 7 in.



### Size of Cylinder, Power, and Capacity of Sterling Threshers per Hour

Thresher Sizes	No. 21	No. 21½	No. 26	No. 30
Size of cylinder	21 in. 4-H. P. 30 to 50 bu. 15 to 25 bu. 5 to 20 bu. 20 to 30 bu.	21 in. 4-H. P. 40 to 60 bu. 15 to 35 bu. 5 to 25 bu. 20 to 40 bu.	26 in. 6-H. P. 45 to 65 bu. 20 to 40 bu. 10 to 25 bu. 30 to 50 bu.	30 in. 8-H. P. 50 to 80 bu. 30 to 50 bu. 15 to 40 bu. 50 to 75 bu.

### Special Attachments

Tailings Etevator—The tailings elevator carries the tailings back to the cylinder. It can be used on either side of the machine. This is one of the many practical features found on Sterling threshers.

Straw Stacker—Straw stackers or carriers are made to carry away both the straw and ehaff, or the straw only. When ordering, the customer should give his preference. When the threshers are ordered for barn floor work and stackers are ordered sent with the machine, a stacker for carrying straw only is sent attached to the end of the shaker. A rope and windlass are not furnished with any down machine, or with No. 21, whether mounted or down. When this rope and windlass are not sent the stacker is supported on props or held at the proper angle by ropes tied to overhead rafters or beams. These stackers will elevate higher than any other make and can be furnished in any length required. Straw stackers are sometimes made to carry 18 to 20 feet away from the machine and then at an angle as much farther. They have been made as long as 60 feet. All stackers less than 14 feet in length will be furnished in one piece. Stackers 14 feet or longer will be furnished in one piece or folding as ordered. All stackers, however, on No. 26 or No. 30, 16 feet or over in length, are sent folding when threshers are ordered with the regular truck.

Grain Bagger—The grain bagger has a double metal spout with a shut-off lever and slide for filling one sack while the other sack is being emptied. The value and time economy of the double spout is well known to everyone who has ever used a thresher with this feature. The fact that this attachment can be used on either side of the machine is a big point in its favor. Where conditions are such that the setting interferes with the bagger in any way it is certainly a convenience to be able to put the bagger on the other side of the machine.

Long Grain Elevator—When the long grain elevator is used the bagger is dispensed with entirely. This elevator delivers the grain directly into the wagon box. When no bagger is used, the grain can also be delivered into half-bushel measures, two of which are part of the regular equipment of each plain machine.

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### Peanut Picker

An attachment for threshing and cleaning peanuts can also be furnished with the Sterling Thresher. It is only necessary to change the concaves, take out some of the cylinder teeth, then change the pulley on the shaker wheel to a 22½-inch size to give a speed of from 400 to 450 revolutions of the cylinder per minute. Of course the speed varies with the conditions of the vines, dryness or fullness of the peanuts, etc. The Sterling Peanut Picker does exceptionally satisfactory work and is growing in popularity every season. In making changes follow carefully directions sent with each machine.

### Pea Threshing Attachment

The Sterling threshing outfit is so arranged that with a few changes such as using a special concave, changing the cylinder teeth and the speed of the pulleys, it can be converted into a pea thresher for hulling peas from the vines. This attachment is the means of saving a great deal of time and expense as the peas are handled very rapidly. Picking the pods from the vines by hand before threshing is generally a tedious job.

### Weights of Sterling Threshers and Attachments

No. 30 x 37, Plain Type Unmounted, approximately	1,825 lbs.
No. 26 x 33, Plain Type Unmounted, approximately	1,650 lbs.
No. 21 x 33 (or No. 21½), Plain Type Unmounted, approximately	1,230 lbs.
No. 21 x 28, Plain Type Unmounted, approximately	1,150 lbs.
Combination Tracks for Nos. 21 or 21½, for 4 or 6-H. P. Engine, approximately	1,150 lbs.
Trucks for No. 30, Metal Wheels and Axles, approximately	830 lbs.
Trucks for No. 26, Metal Wheels and Axles, approximately	675 lbs.
Brake for any of the above Thresher Trucks, approximately	65 lbs.
16-ft. Folding Straw Stacker for Nos. 30 and 26 Sterling, approximately	340 lbs.
14-ft. Folding Straw Stacker for Nos. 21 and 21½, approximately	215 lbs.
Long Grain Elevator, to elevate grain to wagon bed, approximately	200 lbs.
Tailings Elevators, for Nos. 30, 26, 21½, and 21, approximately	90 lbs.
Bagger Attachment, Double Chute, for Nos. 30, 26, 21½, and 21, approximately	146 lbs.
Pea-vine Attachment for No. 30 Sterling, approximately	235 lbs.
Pea-vine Attachment for No. 26 Sterling, approximately	187 lbs.
Pea-vine Attachment for Nos. 21, and 21½, approximately	175 lbs.
Half-bushel Measures, for Nos. 30, 26, 21½, and 21, approximately	6 lbs.

### Approximate Weights of I H C Oil Engines

4-H. P. I H C Oil Engine weighs approximately	1,230 lbs.
6-H. P. I H C Oil Engine weighs approximately	1,665 lbs.
8-H. P. I H C Oil Engine weighs approximately	2,275 lbs.



### **Pulleys and Speeds**

Below is a table of diameters of the pulleys used on the various sizes of Sterling Threshers. These pulleys are driven by flat rubber or patent round leather made-up belts. The regularly furnished cylinder pulley on all sizes has a diameter of 6 inches with a face of 4 inches.

SIZES STERLING THRESHERS	DIAMETER IN INCHES OF PULLEYS USED WITH REGULAR ATTACHMENTS										
	Pulley Cylinder Shaft	Pulley Tailings Elevator	Pulley on Bagger	Shaker Wheels	Driving Apron and Fan	Pulley Stacker Shaft	Pulley Fan Shaft	Pulley Apron Shaft	Pulley Driving Bagger	Driving Tailings Elevator	Pulley Driving Stacker
21 and 21½	6 x 4	8	8	25	14	8	4½	$21\frac{1}{2}$	4½	8	12
26	6 x 4	8	8	25	14	8	6½	21½	41/2	8	12
30	6 x 4	8	8	25	14	8	61/2	21½	8	8	12

In special cases when so ordered, cylinder pulleys with  $4\frac{1}{2}$ , 5, 6, and 7-inch diameters can be furnished, also 6-inch faces when needed.

When a different size pulley is ordered for the cylinder, a different size shaker wheel must also be ordered to correspond, as will be seen by the table below:

For 41/2 and 5-inch cylinder pulleys, order 201/2-inch shaker wheels

For 6-inch cylinder pulleys, order 25 -inch shaker wheels

For 7-inch cylinder pulleys, order 30 -inch shaker wheels

With these pulleys, the required speed of 1,050 revolutions per minute can be attained. The 5, 6, and 7-inch pulleys are used only when threshing grain such as wheat, oats, rye, buckwheat, Kaffir corn, barley, grass seed, etc.

When threshing peas and cow peas, a 14-inch pulley is used. It is not necessary to change the regular shaker wheel in this case.

To thresh peanuts properly, the 14-inch pulley is used, but the shaker wheel must be changed to a 22½-inch diameter to acquire the necessary speed of from 400 to 450 revolutions of the cylinder per minute.

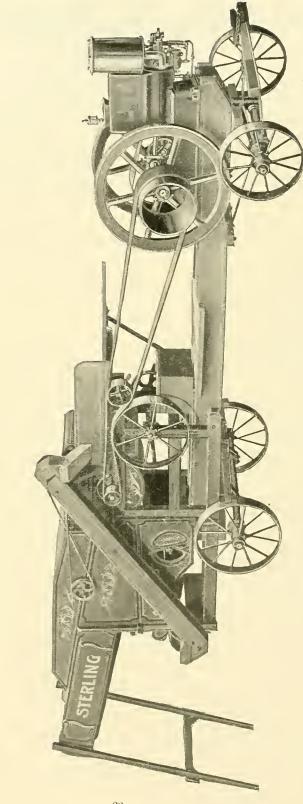
Of course, in every case, the speed required depends entirely upon the condition of grain, straw, vines, beans, peas, peanuts, etc. For example the cylinder speed must be reduced when peanuts are very dry, and vice versa.

The regular pulley furnished for cow peas and peanuts has a diameter of 14 inches.

### How Users Comment on Sterling Threshers

- "It is superior to any machine ever run in this country."
- "The engine and the entire outfit has given me perfect satisfaction."
- "This is the cheapest outfit to operate and the easiest machine to get over the country that we ever had."
  - "It is the very thing for our neighborhood as we have some rough roads to pull it over."
  - "I am highly pleased with the threshing outfit."
  - "It does fully as good work as any."
  - "My separator has done all you claimed it to do."
  - "The outfit has won friends everywhere. It is certainly one of the seven wonders."

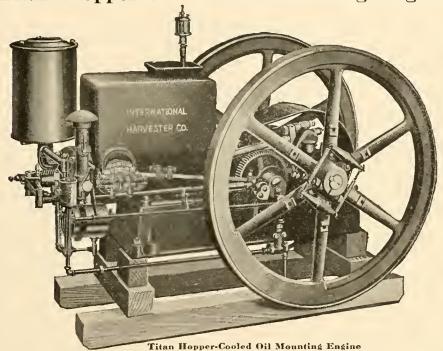
## The Sterling Combination Threshing Outfit is the Most Practical Outfit of Its Kind on the Market Today



Sterling Thresher and I H C Oil Engine mounted on a Sterling Combination Truck. This makes an ideal threshing outfit for a small furner



### Titan Hopper-Cooled Oil Mounting Engine



Titan hopper-cooled oil mounting engines are designed to meet the demand for an engine that can easily be mounted on a farm truck, bob sled or skid, making a portable outfit, or in connection with any special machinery such as well drills, concrete mixers, saw rigs, portable pumping plants, and the like. These engines are especially adapted for such work on account of the compactness of the outfit, their moderate weight, and the small amount of water required for cooling. The hopper-cooled feature also does away with much of the danger of the cylinder or jacket being cracked by freezing, because the hopper is open at the top, thus allowing the freezing water to expand. Hot water can be poured in to facilitate starting.

The engine is the same as the well-known Titan stationary horizontal hopper-cooled oil engine, except that the engine is shipped without sub-base, and mounted on temporary shipping skids. It is regularly fitted for operating on kerosene, solar oil, gas oil, and distillate down to 39°, but will

operate equally well on gasoline benzine, or naphtha.

Equipment—Titan hopper-cooled oil mounting engines are equipped complete for running with the following accessories: One regular size pulley, one square galvanized fuel tank, magneto, one muffler, oil can, oil, one tool box and necessary tools.

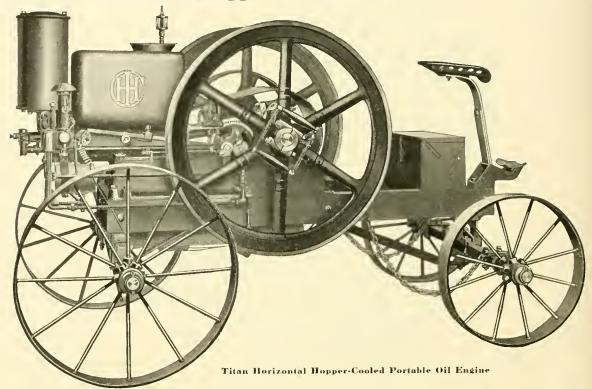
Special Accessories—Special size plain and friction clutch pulleys, etc., furnished on special

order.

	Speed	Regnlar Pulley		Flywheel		Capacity	Capacity of Fuel	Base M Inc	Approximate Shipping	
II. P.	R. P. M.	Diameter Inches	Face Inches	Diameter Inches	Face Inches	of Hopper Gallons	Tank Gallon <b>s</b>	Width of frame	Length of Frame	Weight Pounds
4 6 8 10 12	450 390 375 350 300	12 16 18 20 24	83% 1214 1014 1014 1414	33 40½ 45 49½ 54	2½ 2½ 3 3 3	6 12 16 20 22	12 12 15 15 15	15¼ 17 20 20 21¾	335% 4014 43%4 4614 51%4	1230 1665 2275 2565 2800



### Titan Horizontal Hopper-Cooled Portable Oil Engine



Titan hopper-cooled portable oil engines are particularly desirable for portable work. The absence of the cooling tank makes them more compact, lighter, and simpler than the tank-cooled outfits. The engine is the Titan hopper-cooled mounting oil engine, equipped to operate on kerosene, solar oil, gas oil, and distillate down to 39°, but will operate equally well on gasoline, benzine, or naphtha. These engines embody many desirable features, including the auto sparker, and friction clutch pulley which can be bolted to either flywheel. This type of engine is ideal to use with small threshers.

The trucks are especially designed for this service, and will stand the wear and tear of the roughest roads. They are light, but exceptionally strong and well made, being constructed almost

entirely of steel.

Equipment—Titan hopper-cooled portable oil engines are completely equipped for running, with following accessories: One galvanized fuel tank, exhaust muffler, friction clutch pulley, magneto, tool box, necessary tools, oil can, oil, doubletrees, pole, neckyoke, and wheel braces.

Special Accessories—Special size plain pulleys, friction clutch pulleys, etc., can be furnished

on special order.

	Speed		Friction Pulley	Flyw	heel	Capacity Fuel	Capacity	Tread		Size of Truck Wheels, Inches		Approximate Shipping
н. Р.	R. P. M	Dia. In.	Face In.	Dia. In.	Face In.	Tank Hopper	Gallons	Inches	Front	Rear	Inches	Weight. Pounds
4 6 8 10 12	450 390 375 350 300	20 24 26 28 20	6½ 6½ 6½ 6½ 7½ 7½ 9½	33 40½ 45 49½ 54	2½ 2½ 3 3 3	12 15 20 20 30	6 12 16 20 22	44 46 49 <sup>5</sup> / <sub>8</sub> 49 <sup>5</sup> / <sub>8</sub> 57 <sup>5</sup> / <sub>8</sub>	24 x 3½ 26 x 3½ 30 x 4 30 x 4 30 x 6	$28 \times 3\frac{1}{2}$ $34 \times 3\frac{1}{2}$ $38 \times 4$ $38 \times 4$ $38 \times 6$	$51\frac{3}{8}$ $59\frac{1}{8}$ $66\frac{5}{8}$ $68\frac{7}{8}$ $70\frac{1}{2}$	2005 2595 3435 3740 4200

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